


GOSSEN®

pilot²

EXPOSURE METER



**OPERATING
INSTRUCTIONS**

Congratulations....

...on becoming the owner of a PILOT-2 exposure meter! Your new meter is a product of GOSSEN GmbH, Erlangen, West Germany—manufacturers of precision electrical measuring instruments since 1919, and one of the outstanding pioneers in the design of exposure meters.

Many millions of Gossen meters are in use all over the world, giving their owners reliable service year after year. Well-known camera manufacturers have chosen Gossen exposure meters as components in their finest cameras.

We know you will be pleased with your PILOT-2 and that it will give you faithful service for a long time to come.

Please get to know this fine instrument by reading these pages with your PILOT-2 at hand, thus getting off to a good start for consistently good results.



Your Pilot-2 at a glance

- | | |
|---|--|
| 1. Film speed (ASA) setting knob | 7. Indicator needle |
| 2. ASA scale window | 8. Lever for incident light diffuser |
| 3. Computer rim | 9. f-stops (lens apertures) |
| 4. Zero setting mark | 10. Exposure time (shutter speeds) |
| 5. Matching pointer (coupled to computer rim) | 11. Measuring cell with honeycomb lens |
| 6. Eyelet for neckstrap | |

BASIC SETTING — Look up the ASA number of the film in use (you will find it on the film box or film instruction sheet) and turn the setting knob (1) with a coin until the ASA number of your film is lined up with the white triangle at the ASA scale window (2).

After this basic setting, your PILOT-2 is ready for operation. No further setting is necessary as long as you use the same film type, or film having the same ASA number.

The ASA scale (2) shows the values listed below in red type. The intermediate values are indicated by thin lines on the scale.

<u>6</u>	<u>25</u>	<u>100</u>	<u>400</u>	<u>1600</u>
8	32	125	500	2000
10	40	160	650	2500
<u>12</u>	<u>50</u>	<u>200</u>	<u>800</u>	<u>3200</u>
16	64	250	1000	
20	80	320	1250	
<u>25</u>	<u>100</u>	<u>400</u>	<u>1600</u>	

MEASURING AND READING — For most subjects, simply point your PILOT-2, with diffuser retracted, toward the scene or subject. When large sky areas are included in the scene, direct the meter slightly downwards to exclude light from the sky which would result in too high a reading. (See also: Facts about Light Measurement.)

Turn the computer rim (3) until the yellow matching pointer (5) stands exactly over the white indicator needle (7).

The upper scales now give you the appropriate shutter speeds (10) and f/stop settings (9) for your camera.

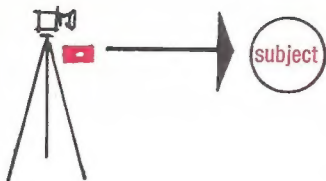
Exposure times with a slash (/) — silver on black — are fractions of seconds; example $1/125 = 1/125$ sec. Plain red numbers are full seconds. Numbers marked 'm' are full minutes.

For Movie Cameras: Use the f-stop opposite $1/30$ sec for standard speed (16 frames per second). For other speeds, double the frames per second and take the result as fractions of a second. Example: 8 frames per second = $1/16$. Read f-stop at $1/15$ sec on scale.)

NOTE: On certain motion picture cameras, the exposure at normal speed — 16 f.p.s. — is not $1/30$ second. Check camera instructions.

HELPFUL FACTS ABOUT LIGHT MEASUREMENT—Your PILOT-2 offers you the advantage of being able to measure either the light reflected from the scene, or the incident light that illuminates the scene! Thus, the meter is designed to give you reliable exposure information under all kinds of picture-taking conditions, and you can make it serve you best by adding your own thinking to the measuring process. (Even the biggest electronic computer needs the human mind to “program” it!) The following will aid you in getting the most out of your PILOT-2 for finest results.

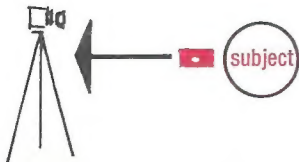
(continued)



Reflected light reading. When you point the PILOT-2 (with honeycomb lens uncovered) from the camera position towards the scene, it measures the light reflected by all parts of the scene, strikes an average and indicates a suitable exposure. And, normally, the exposure indicated by such an overall reflected light reading is perfectly correct.

If the scene contains strong contrasts in brightness or color, it is preferable to measure that part of the scene which requires the most accurate exposure. For negative films, this is usually a darker area which is to show detail in the final black-and-white or color print, whereas for color slides or movie films the lighter areas are usually favored. To measure such important areas, get closer to the subject but not so close that your own shadow or that of the PILOT-2 falls on the subject. Such **close-up readings** are especially appropriate if an important darker subject is backlit or when an important brighter subject is against a dark background.

Or, instead of taking a close-up reading if the subject is inaccessible, you may take a **substitute reading** by pointing the meter at a nearby subject which receives the same illumination as the actual scene, and which is similar to the subject. (Your own hand or ski parka or a nearby flower, for instance.)



Incident light reading. The most convenient way to determine exposure for scenes containing extensive bright or dark areas is by means of an incident light measurement. Simply slide the diffuser over the honeycomb lens by pushing up the lever (8) and point the meter, from the subject position, toward the camera. Or, if the subject is too far away, point the meter towards the camera from a position which receives the same light. Thus, instead of having to measure individual areas of the scene, you measure the actual light falling on the scene and your PILOT-2 will indicate the correct exposure to take care of contrasts.

TESTING ZERO POSITION OF NEEDLE.

When the honeycomb lens of your PILOT-2 is completely covered (blacked out), the white indicator needle (7) must stand at the white dot on the extreme left-hand side of the indicator area. If this is not the case, you can adjust your meter by gently turning the zero setting-screw located near the meter serial number on the underside of the instrument. Make sure that no light falls on the honeycomb lens during the adjustment. (Zero adjustment is rarely necessary as your PILOT-2 is virtually shockproof.)

EVEREASY SAFE-CASE.

For utmost protection of your PILOT-2, always carry it in the sturdy Safe-Case. Turn the screw in the bottom of the case to hold the meter securely. You can open the case easily by pressing both sides.



CAMERA ADAPTER CLIP.

To mount your PILOT-2 conveniently on the accessory shoe of your camera, ask your dealer for the PILOT-2 camera adapter clip. This useful accessory is supplied with a screw for fastening to the underside of your PILOT-2.

SERVICE AND CARE.

Treat your PILOT-2 like the precision instrument it is and, particularly, avoid storage in hot places (glove compartment, trunk or back shelf of your car in summertime, near radiators at home) as continued exposure to heat may affect the photo-electric cell.

Should service be required during or after the original warranty period, the product should be carefully packed (in the original packing material if possible) and sent, PREPAID AND INSURED, to the NEAREST consumer service center listed below. A note, describing in detail the nature of the defect, should be enclosed to expedite handling. Proof of original user purchase MUST be provided for all warranty repairs.

Consumer Service Center
Berkey Marketing Companies
25-20 Brooklyn-Queens Expressway West
Woodside, New York 11377

Consumer Service Center
Berkey Marketing Companies
1011 Chestnut Street
Burbank, California 91506

Gossen Division

BERKEY MARKETING COMPANIES

25-20 Brooklyn-Queens Expwy. West, Woodside, NY 11377 ■ (212) 932-4040
1011 Chestnut Street, Burbank, California 91506 ■ (213) 843-1883

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